CMI editorial report 2013

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CMI and the ESCMID on the Global Scene of Microbiology

At the request of the ECCMID, we have evaluated the balance between various countries' involvements with and contributions to CMI [1]. First of all, microbiology is one of the fields in which Europe has produced more articles and generated more citations in 10 years (80 000 articles between 1997 and 2008, with 1.5 million citations [2]) than the USA (50 000 articles between 1997 and 2008, with 1.2 million citations [2]). This is one of the rare fields in which this trend can be clearly observed. By means of ISI the Web of Knowledge, we gathered the 40 'highly cited' scientists in microbiology. Once we had extended their number of citations to 'all fields' and removed all synonyms, we obtained Table S1, which presents each author's number of citations and H index. This shows that, among the 40 most cited microbiologists, 19 are American, 15 are European, and two are from other continents.

In Europe, the countries with the most publications are the UK, Germany, France, Spain, and The Netherlands, followed by Italy, Switzerland, Belgium, Sweden, and Denmark [2]; the four most cited authors are French, German, British, and Italian [2]. The majority of the articles published within the last few years have essentially focused on genomics; the most cited of all is an article by Stewart Cole on the genome of *Mycobacterium tuberculosis* [3].

If we observe scientific production as a whole, it appears that this is correlated with the gross domestic product (GDP) (Fig. 1). An interesting point is raised by the comparison between the increase in GDP and that in global publications (Fig. 2). It seems clear that the countries whose scientific production is developing most rapidly are the same as those that have been growing in terms of economy over these last 10 years. Among the countries with a high GDP, those that are progressing the most are those that are most open to international students, such as Spain, Australia, or Canada—all countries of immigrants. It seems that welcoming southern students and investigators is a factor in the increase in scientific production. In fact, a similar trend is observed in microbiology, with a noteworthy increase in southern countries' scientific production (Fig. 3).

More directly related to CMI, the most prolific contributors are as follows: Spain, France, China, Italy, Taiwan, The Netherlands, the USA, Germany, and India; those that publish the most are France, Spain, Italy, The Netherlands, Greece, China, Germany, and India (Table 1). The national ratios of submission per capita and those of acceptance are shown in Fig. 4. The reasons why some countries have very little success were analysed, and are shown in Table 2. The major reason for rejection (for 27% of the manuscripts) is that the topic is too locally focused, and thus might not concern the international community; 23% of the submissions were rejected for scientific reasons (e.g. not enough arguments, analysis lacking thoroughness, or contradictory or implausible results). Nineteen per cent of the submissions were outside of the journal's scope, 17% focusing on non-priority subjects, and one review was rejected, because CMI publishes only invited reviews. For the remaining 13%, the reasons could not be analysed, because the manuscripts' files had been archived. The poor coverage of south-eastern Europe and its neighbouring countries was partially addressed, as a first measure, by scheduling a thematic issue devoted to research on infectious diseases in Iran, Egypt, and Turkey [4–7].

Besides this specific region, CMI continues to receive and publish articles from all over the world (Tables 3 and S2). When 2012 figures were compared with statistics for the previous year [8], the most noticeable change concerned Brazil, whose acceptance rate grew by seven points; this gave it a very reasonable acceptance rate, taking it out of the category of least published countries. Also, Korea, Mexico, Croatia and Madagascar have, respectively, published 12%, 20%, 22% and 100% of their submissions, as compared with none in the previous year. Several new countries have also submitted this year: Bangladesh, Central African Republic, Estonia, Indonesia, Malta, Nigeria, and Uruguay. When we compared the sources of our articles over these last 4 years with those of a broad spectrum of journals of infectious diseases (*Clinical Infectious Diseases*, *Emerging Infectious Diseases*, *Journal of Infectious Diseases*, and *Journal of Infection*), it emerged that we publish significantly more articles from any European countries (including Turkey, and excluding the UK, which publishes more in the *Journal of Infection*) and also more articles from Israel, Lebanon, Egypt and Tunisia than the investigated journals (Table S3).

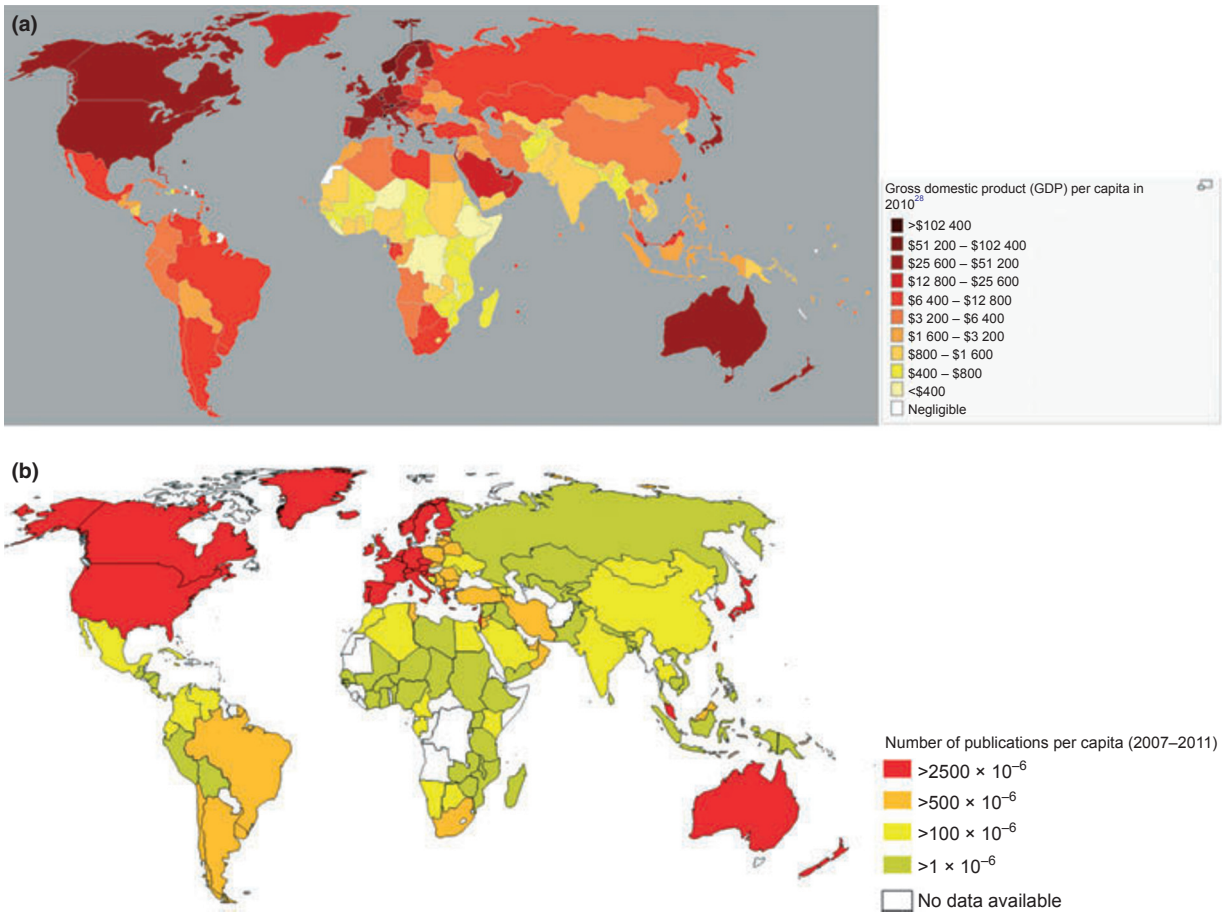

FIG. 1. Wealth and scientific production currently go together. The map (a) extracted from Wikipedia (February 2012), shows the gross domestic product (GDP) per capita, the usual way to measure the wealth of states. The map (b) presents what can be called the current state of 'science domestic production' per capita. Using the same principle as the GDP, this was calculated by gathering, for each country, the number of scientific publications, including all fields, over the previous 5 years (2007–2011) and calculating a ratio with the number of inhabitants. This results in the number of publications per capita.

CMI with regard to international competition

CMI's position with regard to international competition is continuing to improve. Even though its 2011 impact factor showed a slight drop as compared with 2010 (4.540 vs. 4.784), this is still a very good score within a particular phase for the journal. Indeed, this is attributable to the increased size of the journal in 2010, a strategy that was adopted to clear up the backlog of articles waiting to be published and reduce the delays before publication (see 'Production management', below). Nevertheless, the number of citations has increased by 12.5%, which shows that CMI is more and more valued by the scientific community.

Readership

After CMI articles were downloaded 619 507 times in 2011 (+61% as compared with 2010), with an average of 50 000 downloads per month, 2012 has started with 58 000 in January. The online usage is regularly growing: on 15 September, it had reached 527 621 downloads, i.e. approximately 62 000 per month, so it is already 20% more than last year.

Editorial Trends

Editorial board

While analysing the geographical origins of the CMI editorial board (Fig. S1), we noticed that Germany and Turkey were under-represented in proportion to their populations. In order to fix these gaps, four members were recruited in the Scientific Committee, two from each country (respectively, Oliver A. Cornely and Petra Gastmeier, and Sevtap Arikan-Akdagli and Onder Ergonul). These members were also chosen in order to reinforce two sections that were growing, and consequently required more experts:

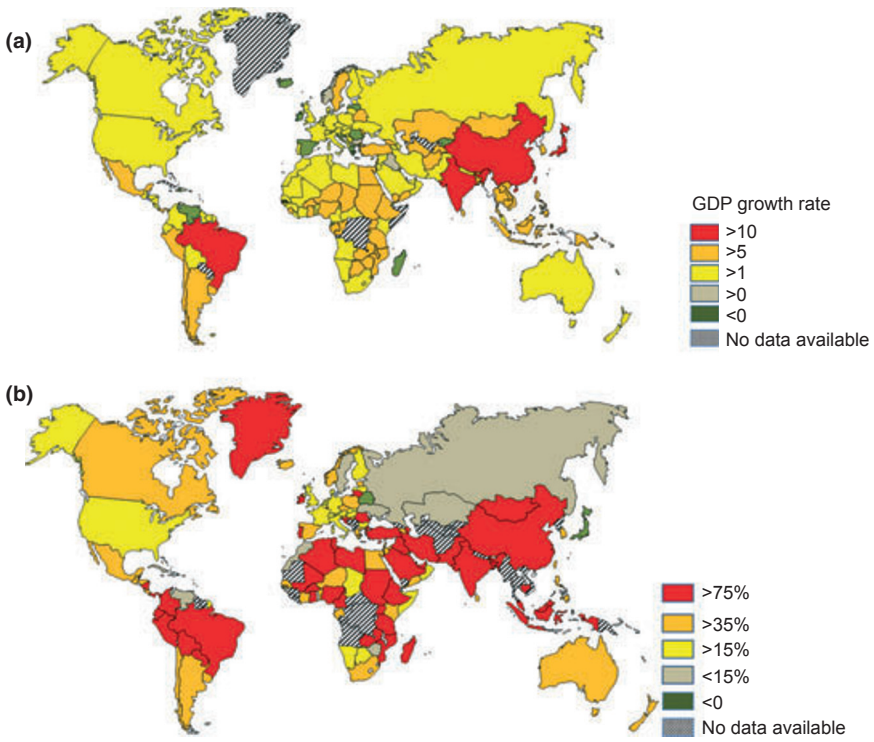

FIG. 2. Growing rates of gross domestic product (GDP) and scientific production also go together. (a) Made by calculating the real GDP growth rate over the previous year (2011). (b) Made by calculating the growth rate of scientific production in 'all fields' between 2001 and 2011.

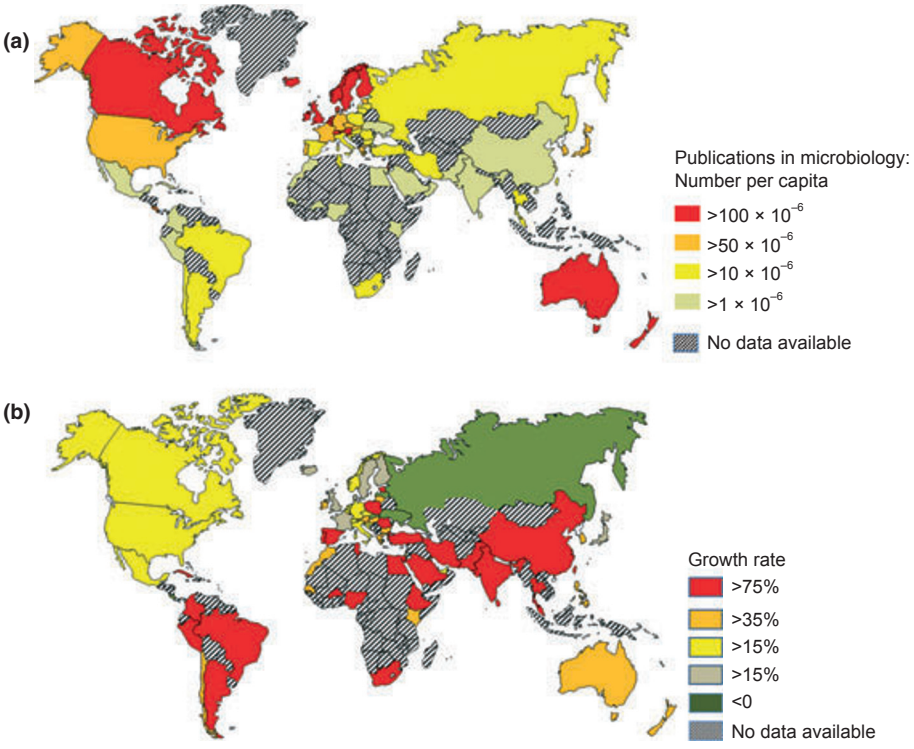

FIG. 3. The rate of evolution scientific production in microbiology. (a) The number of publications per capita in microbiology over the last 5 years (2007–2011). (b) The growing rate of publications in microbiology between 2001 and 2011.

Epidemiology and Mycology. A Swedish expert in mycology, Lena Klingspor, was also hired, completing this section, which now includes four experts, as compared with one in 2011. In addition, an expert in prosthetics infections, Werner Zimmerli, also joined the board, as these are becoming a major issue in the journal. Concurrently, some members who had been working for CMI for more than 3 years voluntarily left the board. In this way, CMI ensures that its editorial board is adapted to its evolving scope and remains dynamic through regular renewals.

TABLE 1. The countries with the most submissions and publications in CMI in 2011

Country of submitting author	Number of submissions	Country of submitting author	Number of accepted manuscripts
Spain	124	France	22
France	102	Spain	21
China	70	Italy	16
Italy	69	The Netherlands	16
Taiwan	53	Greece	9
The Netherlands	52	China	8
USA	45	Germany	8
Germany	36	India	7
India	36	USA	7
UK	33	Denmark	6

Topical coverage

Clinical virology, mycology and tropical and parasitic diseases continure to expand within the scope of CMI publications. This is because of the increase in the number of submissions in these domains, subsequent to the growing interest in them within the CMI editorial team, the ESCMID, and the scientific community in general. Otherwise, CMI preserves a balance between the other domains (bacteriology, epidemiology, and infectious diseases).

The most cited and most downloaded articles in 2012 show that CMI remains a reference for resistance to antibiotics and the exploration of techniques, and is also attracting a growing interest in virology (Tables S4 [9–18] and S5 [19–28]; from reference 21 see Supporting information: Bibliography references).

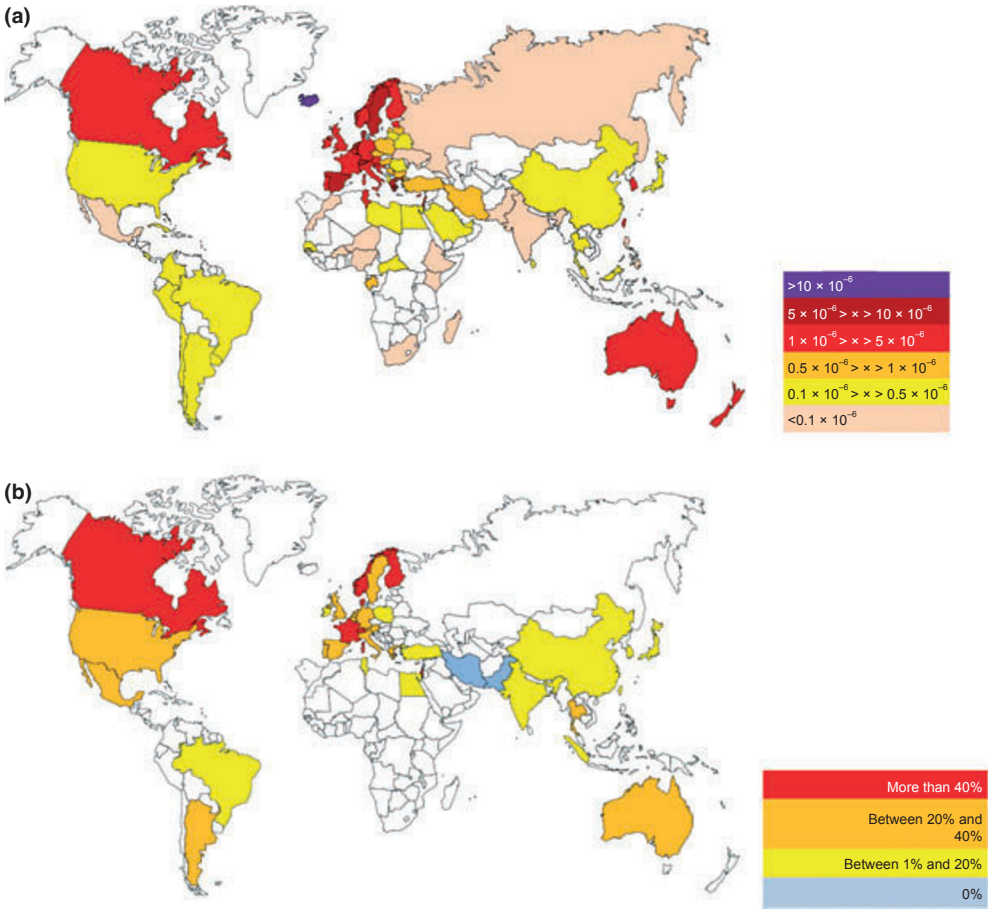

FIG. 4. The geographical distribution of CMI submissions and publications between 2010 and June 2012. (a) The national submission ratios per capita. (b) The national acceptance rates.

TABLE 2. Why are some so low?

	Number of papers accepted/submitted	Out of scope	Science	Unsolicited Review	Locally limited	Not a priority	Files archived or reason undefined
Brazil	1/28	9	4	1	5	1	7
Egypt	0/7	1	2	0	3	0	1
Iran	0/20	2	6	0	7	2	3
Turkey	1/29	3	6	0	5	13	1
Pakistan	0/11	3	3	0	5	0	0
Total	2/93	18	21	1	25	16	12
	235	19%	23%	1%	27%	17%	13%

TABLE 3. The 20 countries with the most submissions, with their acceptance rates (January 2010 to 11 September 2012)

Country	Submitted papers	Accepted papers	Acceptance ratio (%)	Rejected papers	Rejection ratio (%)
Spain	339	82	24.19	257	75.81
France	332	134	40.36	198	59.64
China	229	24	10.48	205	89.52
Italy	220	68	30.91	152	69.09
Taiwan	171	26	15.20	145	84.80
The Netherlands	149	45	30.20	104	69.80
USA	145	38	26.21	107	73.79
Germany	117	38	32.48	79	67.52
India	105	12	11.43	93	88.57
UK	94	32	34.04	62	65.96
Greece	91	35	38.46	56	61.54
Switzerland	82	37	45.12	45	54.88
Brazil	80	8	10.00	72	90.00
Turkey	76	4	5.26	72	94.74
Republic of Korea	66	8	12.12	58	87.88
Denmark	54	22	40.74	32	59.26
Japan	54	9	16.67	45	83.33
Sweden	51	13	25.49	38	74.51
Australia	49	17	34.69	32	65.31
Israel	46	20	43.48	26	56.52

Editorial content

Each CMI monthly issue continues to focus on one key topic. The 2012 schedule shows that we are keeping CMI's historical focuses, such as resistance to antibiotics, and at the same time opening up to disciplines of growing interest for CMI and the scientific community, such as advances in virology, infectious diseases, parasitology, and epidemiology, as well as the growing significance of countries emerging on the global scene of science (see Supporting information: Table S6 and Bibliography references 29–83). In 2013, several issues will be dedicated to new fields, and some controversial topics (such as infectious cases of obesity, bacteraemia, pig-related infections, and controversies on predictions regarding infectious diseases); also, virology and parasitology will be given a place of honour, with topics such as the analysis of the available detection resources in tropical countries and the spread of mosquito-transmitted diseases (Table S6). In addition to the variety and the scientific interest of these topics, the CMI team is proud to display, each month, front covers that are carefully designed to fulfil both science requirements and aesthetic tastes. We hope that readers appreciate this.

CMI Infection Hot Topics

We have continued to appeal to staff and guests for feedback and reactions on current topics. In 2012, we have published reactions on the ancient plague (see Supporting information: Bibliography reference 84], *Staphylococcus aureus* endocarditis (see Supporting information: Bibliography reference 85), antibiotic resistance (see Supporting information: Bibliography reference 86), the relationship between soldiers and epidemics (see Supporting information: Bibliography reference 87), the use of interferon-gamma release assays (see Supporting information: Bibliography reference 88), and 'culturomics' as a new approach to studying the human microbiome (see Supporting information: Bibliography reference 89).

Production Management

Turn-around

The number of submissions continues to increase regularly (+27% since 2008), while the acceptance and rejection rates remain stable (17% acceptance; 83% rejection). These rates reflect CMI selection policy, based on high quality, and fit the publication requirements.

Backlog management

A few years ago, many papers were waiting to be published (backlog), which implied very long publication delays. Therefore, over the years, several measures were implemented in order to take these delays down to a reasonable level. In 2010 and 2011, the size of the journal was increased, with 668 articles being published, i.e. 67% extra copy. The copy backlog was divided by three, and the delay between final acceptance and print publication has been stable, at 4 months, since November 2011. In 2012, the CMI paper edition has returned to its original size (100 pages). In order to meet both volume and quality requirements, we decided to publish a part of the journal online only. Since August 2011, all Research Notes have been switched to e-format, with their abstracts published in the print issues; and in January 2012, all justified oversized Original Articles (exceeding 2500 words)

joined those. This means that more articles can be published with shorter delays. The e-format has exactly the same citation rate and accessibility, so the authors are not penalized. Also, another advantage of the new policy is that e-articles do not wait before publication: these are displayed online in their unedited version, as are all CMI articles, 1 week after acceptance, and then 3–5 weeks later in their copy-edited version, and their abstracts are immediately allocated to the next print issue. In the first nine issues of 2012, 79 online-only articles were published, representing 376 pages that would have otherwise been added to the backlog and have waited before publication. The resized journal thus now includes a themed section (an editorial and three to five invited reviews), ten Original Articles, and the abstracts of online-only papers. With this new policy, the backlog is naturally decreasing.

Processing time

The processing time for the management of the manuscripts has continued to improve since 2009. In 2012, this averaged 18.5 days, i.e. less than half of the 2009 figure (40 days). This is based on an average of 7 days for immediate rejection, and 30 days for a first decision after peer-review (acceptance, rejection, or revision).

Conflict of interest policy

In order to conform to the most rigorous standards of transparency, preserve public trust in the peer-review process, and the credibility of the publication as a whole, CMI has updated its transparency declaration form. We now request a full statement as established by the International Committee of Medical Journal Editors (ICMJE).

Conclusion and Perspectives

Through its interest in both growing and more established disciplines, its attention to communicating discoveries from all over the world, and its willingness to cover current or even potentially controversial topics, CMI suits, all at the same time, the fields of activities of the ESCMID, which owns the publication, frontline science, and also, as both a result and a choice, the geopolitical evolution of the global scene of science.

By continuing to adapt its publication scope to current issues and improving the practical context for contributors (in terms of delays, transparency, and fairness of the peer-review), CMI aims to maintain a high standard of publication, in order to provide the scientific community with cutting-edge research results and analysis.

Transparency Declaration

No conflict of interest is declared.

Supporting Information

Additional Supporting Information may be found in the online version of this article:

Figure S1. Geographical distribution of the CMI editorial board.

Table S1. The 40 'highly cited' in microbiology.

Table S2. Submissions and acceptances per country (January 2010 to 11 September 2012).

Table S3. Comparison of the geographical origins of CMI submissions and publications with other journals' production.

Table S4. Ten most cited papers in 2012.

Table S5. Ten most downloaded papers in 2012.

Table S6. Themed sections published in 2012 and scheduled for 2013.

Data S1. Bibliography [21–89].

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